

Very Helpful Information and Frequently Asked Questions

- Q1 Do we to test all the parameters found in the table on pages 12-16 of the Notice of Intent (NOI) form? [actual table page numbers may vary depending upon printer formatting]
- A1 Yes, at least one sample of the **INFLUENT** must be tested for every pollutant in the table. Pay particular attention to the minimum levels and test methods found in Appendices III and VI of the RGP. Existing data for the required parameters up to two years old may be used in place of collecting a new samples. **Fill in the sample data, methods, and MIs for both the pollutants believed absent and present.** (Do not check believed absent and leave the rest of the line blank).
- Q2 What happens if I need time to comply with the RGP or get my NOI submitted?
- A2 EPA recognizes that there are a number of discharges in Massachusetts and New Hampshire that are currently operating at approved site remediation projects. As described in section V.A. of the Fact Sheet, such existing dischargers will need to determine whether they will submit an NOI for coverage under the RGP or an application for an individual permit (Forms 1 and 2C) within **30 days** of the effective date of the final RGP. However, coverage under the RGP will not be effective until EPA-NE has reviewed the NOI or application information, made a determination that coverage under the RGP is appropriate, and notified the owner/operator in writing of this determination. The effective date of coverage will be the date of signature of the notification letter by the Director. Until the applicant receives a notification letter of permit coverage from EPA, these discharges will continue to be covered under their existing mechanisms. While EPA has not revised the final RGP based on the comment, given the anticipated number of NOIs from these types of sites that EPA will need to process, EPA will make every effort to provide these dischargers with sufficient transition time to make any necessary changes to treatment systems in order to comply with the RGP. [Page 27 from EPA's RTC Document]
- Q3 When and how do I report my discharge monitoring data?
- A3 You are required to make the monthly sampling data at the site. You are required to send in the data only if there is a violation of the permit limits or you are specifically requested to send in data by the EPA or the State. See RGP Appendix VIII for data instructions.

There is no required form for data submission. The minimum information requirements are found in Appendix VIII See "Appendix VIII DMR Form" which is found immediately under this document on this web page, for a sample format you may use if you wish.

- Q4 How does EPA determine the specific parameters to be monitored by the applicant?
- A4 EPA requires monitoring of all parameters with concentrations above the criteria listed in Appendix III that are marked as believed present (or not marked believed absent) on NOI Pages 12-16.

Where data is absent from the table (Pages 12-16) or the reported Minimum Level for a sample is well above the ML listed for that parameter in Appendix VI, EPA may require monitoring for that parameter in the authorization letter. **Absent data to support an assertion of believed absent, EPA often requires monitoring of such parameters.**

- Q5 What parameters are most frequently required in authorization letters?
- A5 Total Flow (#53) and pH (#54, #55, or #56) are required in essentially all authorization letters.
- Q6 If a discharge is to a wetland, what is the Water Quality Classification?
- A6 The water body adjacent to the wetland sets the water quality standard (WQS).
- Q7 If a discharge is to a unnamed tributary (unclassified), that flows to a Class A waterbody, is that considered a discharge to a Class A waterbody?
- A7 Yes, unlisted tributaries to larger streams are the same classification as the larger stream into which they flow.
- Q8 Is it permissible to have new discharges to Class A waters?
- A8 New discharges to Class A waters are prohibited in NH.
They are prohibited to Class A waters in MA unless permission is granted by the state.
Speak with Kathleen Keohane of the MA DEP at (508) 767-2856.
- Q9 Dilution is allowed to meet fresh water metals limits. Is dilution allowable for salt water metals limits?
- A9 No, salt water metals limits must be met at the point of discharge.

Q10 I have a discharge that could go to an unnamed tributary brook of a larger nearby river. The discharge would intercept the tributary approx. 300' upstream of the river. For dilution factor calculations should I consider the DF for the unnamed brook or for the larger river?

A10 Consider the DF for the unnamed tributary

Q11 Since the discharge site has no listed endangered/threatened species do I still need to perform consultation with the fish and wildlife dept.?

A11 A consultation does not need to be conducted if there are no listed species

Q12 If parameters are detected in the influent which are not associated with the site remediation project (e.g. chlorinateds at a gasoline remediation), am I required to check "believe present" and meet the discharge limit?

A12 Yes

Q13 If I detect a parameter in the influent, but I do not believe it will present in the discharge (i.e. the treatment system will remove it), can I check "believe absent"?

A13 No. The "believe absent or present" designations refer to the influent to the treatment system.

Q14 The groundwater contains naturally occurring elevated levels of iron. After passing through the treatment system (geared for VOCs) the iron concentrations are reduced, but not below the Appendix III Effluent Limit. Discharge is into a detention pond where the 7Q10 is essentially zero. Do we need to add additional treatment apparatus to reduce the iron concentrations to below 1000 ug/kg?

A14 Treatment for iron will need to be employed to meet the RGP's applicable iron limit, which ranges from 1-5 mg/l, depending on dilution. If additional time is required to comply with the iron limit, we could allow a reasonable time period for compliance. We could do this by letter as a response to a request by an owner/operator. These requests should be sent in with the NOI if possible.

- Q15 I have reported concentrations of certain constituents that are below the Minimum Level (ML) for the method established by EPA. Should those concentrations be entered as zero because they are below the ML? Does that also mean that those constituents should be marked "Believe Absent" even though the lab detected them?
- A15 If concentrations are below the ML, these sample values should be reported as zero. However, if a result for a parameter is below the ML but higher than the MDL/RDL, such parameter cannot be deemed "believed absent" for purposes of the NOI.
- Q16 When calculating the average concentration for a particular contaminant how should non-detects be considered? Should include them as a zero, use half the ML, or something else?
- A16 Non-detects should be designated as zero values when used for averaging purposes.
- Q17 Due to the presence of one or two VOCs at high concentrations the lab had to dilute the sample resulting in detection limits for the remaining compounds that are significantly higher than the ML given in Appendix VI. Should we calculate a new ML ($RDL \times 3.18$), use or RDLs, or just enter the EPA MLs?
- A17 If the sample needs to be diluted, it would be OK to use a revised MDL for this sample. We would urge the lab to do the best that it can to achieve the MLs. If Possible sample for all other VOCs you would expect to find at lower concentrations before you dilute the sample to check for the one or two at high levels?
- Q18 If we only take one influent sample, do we put the results under the max or avg column?
- A18 If you take one influent sample only, you should report it in the maximum daily column, even though, technically, this is also the "daily average".
- Q19 If I put concentrations under the max column and calculated associated mass loading, should I use the flow rate from the day of sampling or avg for month or max for month?
- A19 If you put concentration in maximum daily column, you should use the maximum design rate reported on the second page of the NOI form (Part 2.b.2) to calculate the mass loading.

Q20 If I put concentrations under the avg column and calculated associated mass loading, should I use the flow rate from the day of sampling or avg for month or max for month?

A20 If you report concentration in the average column, you should use the average flow rate reported on the NOI to calculate the mass loading.

Q21 Are metals samples to be tested for total or dissolved?

A21 Total Recoverable Metal.

See 40 CFR §122.45(c): ***Metals. All permit effluent limitations, standards, or prohibitions for a metal shall be expressed in terms of ``total recoverable metal'' as defined in 40 CFR part 136 unless: (1) An applicable effluent standard or limitation has been promulgated under the CWA and specifies the limitation for the metal in the dissolved or valent or total form; or (2) In establishing permit limitations on a case-by-case basis under Sec. 125.3, it is necessary to express the limitation on the metal in the dissolved or valent or total form to carry out the provisions of the CWA; or (3) All approved analytical methods for the metal inherently measure only its dissolved form (e.g., hexavalent chromium).***

Q22 There are one or two VOCs in our influent samples at very high levels and we have to dilute our samples. This results in detection levels in the 100's or 1000's. Is this acceptable?

A22 This is a common problem. EPA's recommendation is to run the sample twice, at different dilutions. I would look at the final concentration of the high compound and look at your initial calibration. The EPA would recommend rerunning the sample at a lower dilution. 5,000/1,000 or 1:5 dilution to get the other compounds at a lower reporting level. (Unless the 5 ppm is a NPDES violation).

Q23 According to Appendix III the minimum level for Acenaphthene is 1 ug/L. The lab data reports the RL as 10 ug/L. The result with this RL was "ND", but is the RL low enough?

A23 Although the maximum value for the individual PAH compounds is 0.0038 ug/l, the compliance limit is equal to the minimum level (ML) of the test method used as listed in Appendix VI. Your lab should get down to 1 ug/l or lower for the ML.

- Q24 For TPH we had our lab run SW8015B Diesel Range Organics. I just noticed that Appendix VI lists Test Method 1664. The result via 8015B was 0.20 mg/L (RL = 0.052 mg/L) Is this method acceptable? Should I specify Method 1664 in the future?
- A24 These are different methods. For Oil and Grease use 1664 and not 8015B - DRO. The 8015 is a subset of the total petroleum content. The 1664 measures diesel, fuel #2, 4, and 6, bunker oil, and greases.
- For Method 504.1 for EDB, we cannot meet the 0.01 ug/L limit listed in Appendix IV.
- Q25 We currently see 0.02 ug/L. Based on our conversation, we will try to run 0.01 standard, but if 0.02 ug/L is the lowest we can see, we will narrate this in the Case Narrative section of our report. You had said this is satisfactory. The Drinking Water Standard for EDB is 0.02 ug/L.
- A25 The lowest std in the 504 method is 0.02 (use this in the reference in narrative). It's fine.
- Q26 It is not possible for our lab to achieve an ML of 5 ug/l when testing Pentachlorophenol by Method 8270. Our lab can get down to 10 ug/L. .
- A26 The new revised (lower) CLP is 10 ug/L for Pentachlorophenol.
- Q27 Total BTEX (total of all compounds) at 2 ug/L by method 8260 is not attainable. We can see 0.5 ug/L per compound, but we cannot see 0.3 ug/L per compound, which is what we would have to do to meet the total BTEX requirement at 2 ug/L.
- A27 We suggest that you add up the total of the individual components of the BTEX and report this. This may result in a total BTEX of up to 5 ug/l and this is acceptable.
- Q28 Total Phthalates at 5 ug/L by Method 8270 cannot be attained by our lab. We see individual phthalates at 10-20 ug/L. Should total phthalates be run by method 420.1 or 420.2? Method 420 is for Total Phenolics.
- A28 The appropriate Total Phthalates Method is 8270. The ML of 5 ug/l is possible if the sample is prepared properly.
- Q29 Where can I find guidance on the ML -minimum level? I have read 40CFR part 136, Appendix B and this is not addressed. It is only a discussion of the MDL or method detection limit. Where does the factor of 3.18 come from?
- A29 ML is the minium level (of quantiation). The 3.18 is from dividing 10 by 3.14 (t-distribution) for the 7 replicates used to determine the MDL. This may change to the F test for the MDL, in which the ML will be 10 times the MDL, EPA, Revised Assessment of Detection and Quantitation Approaches, Oct 04, EPA-821-B-04-005.

Q30 Following question 1, All the ML's listed in the Remediation General Permit - Appendix VI are supported in our lab by a low calibration point that honors all appropriate calibration curve QC criteria. Is this enough to satisfy the requirement?

A30 Yes, in many chemical analyses the ML is the lowest level for an acceptable calibration.

Q31 Often the laboratory has to dilute influent samples for high levels of target compounds.

This proportionately increases the reporting limits for all compounds above the appendix VI ML's. This is a routine procedure for any laboratory that prevents gross contamination of equipment. In our experience with 8260, analyzing samples with compounds >5X the upper calibration level can damage equipment and/or compromise our ability to achieve trace detection limits and contaminant free method blanks in subsequent analytical runs. In my lab this equates to roughly a maximum of 500ppb I can understand this being a problem for an effluent sample but this is an unavoidable circumstance for influents.

A31 The influent data is important to identify the compounds of interest so the EPA wants to get as low as possible.

Q32 What is the agencies position on permit's submitted with compounds not achieving the ML because of required dilution? What guidance can you give to deal with this issue?

A32 The guidance is still under consideration. The EPA is concerned with over diluting the samples. The EPA recommends analyzing the sample twice. Based on the VOC screening, one run would be for the high concentration so the target compound is in the middle of the initial calibration. The second would be based on the highest calibration point. The EPA recommends a dilution at 5 times the highest standard used in the initial calibration for the Method 8260.

Example 1: If the screening had a 5,000 ppb level and your lab's high standard is 100 ppb. A 1:100 dilution and a 1:10 is recommended. The ML would be 10 times rather than 100.

Example 2: If the screening had 500 ppb, the dilutions would be 1:10 and no dilution. The MLs would be meet rather than 10.

Q33 Methods 8260C and 8270D are still in draft form. We utilize 8260B and 8270C which are the latest final versions. Is this OK?

A33 Yes

Q34 Is 8082 an acceptable alternative method to 608? If 8260 and 8270 are acceptable substitutes for 624 and 625 then 8082 would seem a logically extension of this.

A34 Yes

Q35 Is method 3510C an acceptable alternative to 3520C? This is a separatory funnel method.

It is very much the identical technique presented in both 608 and 625 so I would think it is a logical extension to allow the 3510C reference as well.

A35 Yes

Q36 Are the total phthalate and total phenol compounds limited to the list of EPA priority pollutant compounds. The actual possible variations for these compound classes could range in the 100's to 1000's with no practical method to determine all variations.

A36 Total phenols should be analyzed by Method 420.1 or 420.2. There is no EPA method for total phthalates so the subset in Method 8270 is the answer.

Q37 Can it also be assumed that the ML for total phthalate and total phenol is intended to represent the average ML for an individual compound. For example, if the laboratory was to sum the ML's for all phthalates it would be much higher than 5ug/L.

A37 The ML should be the highest reported phthalate ML. Usually, bis(2-ethylhexyl)phthalate is observed in the sample so this is not an issue.

- Q38 We exceeded the ML's on the influent because it was only processed at a dilution due to TCE @ 1500ppb. The EPA's response was the NOI has no data to support the believed absent statement. Even if we followed the 5X guidance prescribed below we would still miss some ML's at 3X. What should I advise this client in order to correct this? Since holding times have been exceeded should I instruct them to collect another sample?
- A38 The EPA recommends another sample be collected and analyzed at a lower dilution, 1:3. You are correct. The ML would still be 3X, but it would be better than the 25X ML and the best we can do with the TCE at 1500 ppb.
- Q39 In order to obtain an "influent" sample and be able to provide the necessary data (Appendix III) in an NOI at least 14 days prior to commencement of discharge, we plan to collect sample(s) from extraction well(s) to be connected to the system during the next scheduled groundwater monitoring well sampling event. Do you recommend we collect a single sample from one "representative" well or a composite sample from all wells?
- The reason it is in question is that collection from a "representative" well could result in abnormally low or high concentrations...and although a composite sample would be most similar to the water collected from a system manifold sample port, VOCs may be lost during sample collection (a bit similar to water being extracted through remediation system piping prior to an Influent sample port).
- A39 The RGP requires that influent be sampled so that it will provide a "representative" analysis of the effluent. I would say that if there are 8-10 wells that a sample from one would not likely be representative, but a composite off all wells may not be feasible. I would say use your best judgement in such cases and would suggest a composite of water from 3 or 4, or roughly 50%, of these wells.
- Q40 Using Method 8270 as listed in Appendix VI, the detection limits for the SVOC analytes including the Group I PAHs was 6 ug/L. Typically, the NPDES effluent limit for Total Group I PAHs is 10 ug/L. Do the detection limits need to be lower, e.g. 0.1 ug/L, as required in Appendix III of the RGP and under the current NPDES limit to demonstrate a total of less than 10 ug/L? Or are low detection limits only required for effluent limits once the RGP approval letter is issued?
- A40 The detection limit of 6 ug/l is OK. However, if you suspect that PAHs are present or past sampling has shown their presence, I will likely require a few months of sampling for these PAHs once the RGP is authorized, with a lower detection limit, to be able to demonstrate with more certainty that they are not present at detectable levels.

- Q41 Under the RGP, our allowable pH is 6.5-8.3; influent pH in our system (naturally occurring GW) was 6.1 and the effluent was 5.9. I randomly tested pH the other day when I was on Site and the influent pH was 6.8; effluent pH was 6.7. Do we need to report this? In our system we are adding FeRemede which has the tendency to decrease pH but very slightly.
- A41 You should report the data which showed a pH level outside of the acceptable range. You can request a waiver from the lower end of the pH to adjust it down to 6.0 and we could consider making this change to your permit after talking with the MADEP and reviewing the receiving water status.